

ChromaBlastTM v1.0

Getting Started Guide

For EPSON Stylus[®] PRO 4880



ChromaBlast™ Getting Started Guide for the EPSON Stylus® PRO 4880

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Introduction

Welcome to Sawgrass Technologies, Inc. and ChromaBlast™. We are excited to offer a total cotton solution for your business. We look forward to working with you and to a continued partnership in digital imaging.

The ChromaBlast™ Getting Started Guide contains information for using ChromaBlast™ inks and ChromaBlast media, along with helpful tips for getting the best printing results possible. The information provided pertains only to the use of ChromaBlast™ inks in your printer.

ChromaBlast 4880 Driver v1.0 is included with the ChromaBlast™ system. Developed by Sawgrass Technologies, the ChromaBlast Driver™ is user-friendly software that enables you to maximize output quality and quantity. Please refer to the detailed instructions provided in this manual or on your ChromaBlast Driver™ CD to customize each print.

Technical support is available from your Authorized ChromaBlast™ reseller or directly from Sawgrass Technologies, Inc. See the section entitled *Technical Support* for additional information. Please feel free to contact us with your feedback about our products. For additional information on ChromaBlast™ inks, ChromaBlast™ v1.5 media, or our other products, visit our web site at www.sawgrassink.com. Thank you and enjoy ChromaBlast™.

About this Document

This document contains descriptions and procedures for using ChromaBlast™ inks, along with additional information on setting up your EPSON Stylus PRO 4880 printer and for getting the best results from use of this system.

The documentation provided pertains only to the use of ChromaBlast™ inks in your EPSON Stylus PRO 4880 ink jet printer. To assist you in the overall setup process, references are made back to the *EPSON Stylus PRO 4880 Printer Basics Guide* for instructions.

To help point out important information, specific instructions, and helpful tips, look for the following symbols:



Indicates **Must-Do** items, including warnings and important guidelines. These must be followed to prevent damage to your printer.



Indicates useful tips for printing and sublimation.

Installing ChromaBlast™ Cartridges



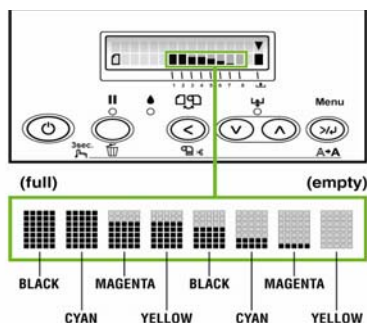
Read This

Do not install the Epson Inks provided with the printer. Please call Sawgrass Technical Support if you need assistance installing the ChromaBlast™ inks.

If you are replacing existing cartridges because they are empty or low, please see the following instructions. If not, go directly to step #1

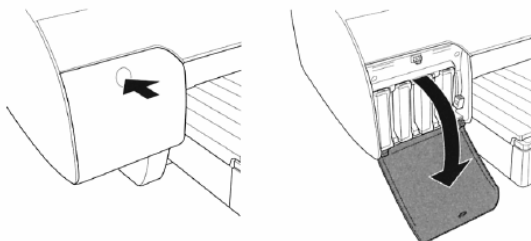
When a cartridge is empty or low, INK LOW or REPLACE INK OUT will display on the LCD panel. Raise, then lower the ink levers on either side of the printer. The ink indicator on the LCD panel will flash, indicating which cartridge is low or empty. Be sure you have the correct color cartridge for replacement.

NOTE: The LCD Panel will indicate the ink colors of the original OEM ink configuration and not the ChromaBlast ink configuration



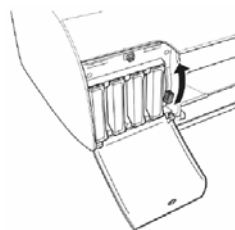
CHROMABLAST INK CONFIGURATION

1. Ensure the printer power is on. Press the ink compartment cover to release the latch and open the cover.



2. Raise the ink lever to the unlocked position. The ink lever is located to the right of each ink compartment. If you are installing a complete set of ink cartridges, then install using the following order starting from left to right:

**Black (CB), Cyan (CB), Magenta (CB),
Yellow (CB), Black (CB), Cyan (CB),
Magenta (CB) and Yellow (CB).**

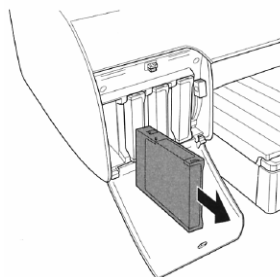


Note: The cartridge label should be facing left as the cartridge is inserted into its slot.

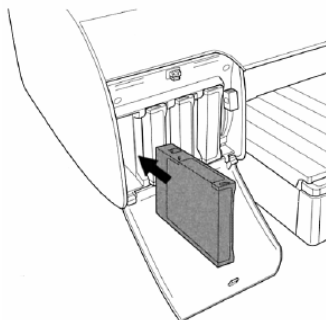
Continue to step 5 below.

If you are just replacing an empty cartridge, then continue to step 3 and 4 below.

3. Remove the empty ink cartridge from the printer.

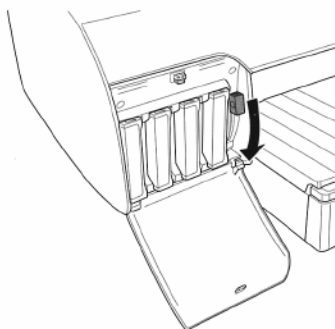


4. Remove the replacement ink cartridge from its packaging and insert it into the slot with the label facing left. Do not force the cartridge into the slot.



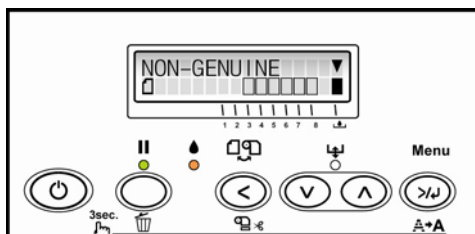
If the cartridge does not insert smoothly into the slot, double check to make sure you have the correct cartridge installed in the correct slot. If the ink light remains on after installing the cartridge, remove the cartridge and reinsert to ensure it was fully placed in the slot.

5. Lower the ink lever to the locked position.

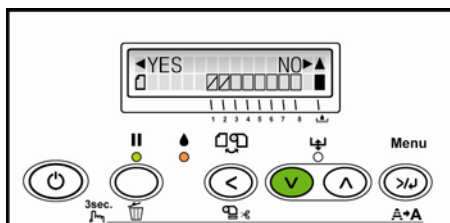


6. Close the ink compartment cover if you have standard size ink cartridges installed. After all eight cartridges are installed, lower the ink levers. The printer will begin charging the ink-delivery system.

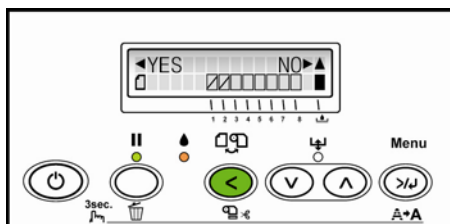
7. After approximately 1 minute, the ink level messages will appear on the LCD panel. The LCD will indicate that the printer recognized “NON-GENUINE” ink cartridges.



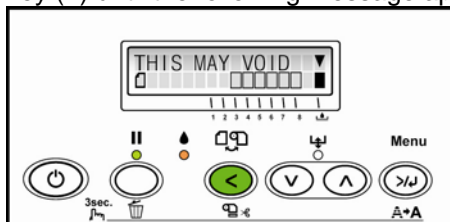
8. Press the down key (V) until a message appears that asks the user whether the ink cartridges are “NON-GENUINE”.



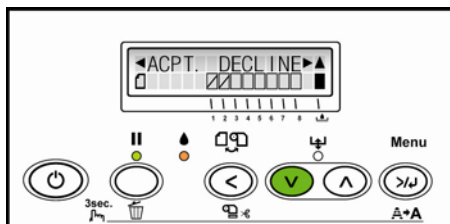
9. Press the left key (<) to acknowledge that the cartridges are “NON-GENUINE”.



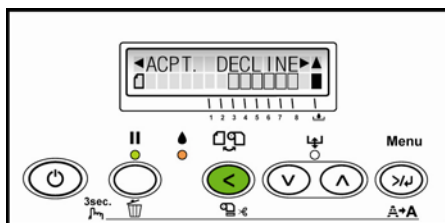
10. Press the left key (<) until the following message appears:



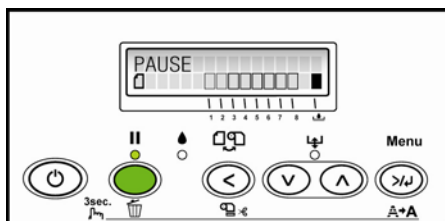
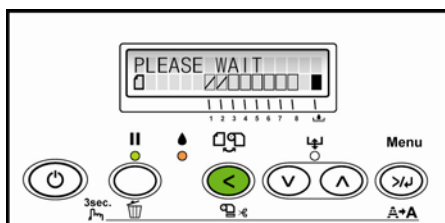
11. Press the down key (V) until the following message appears:



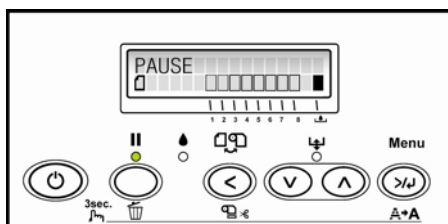
12. Press the left key (<) to accept acknowledgement of the warranty message.



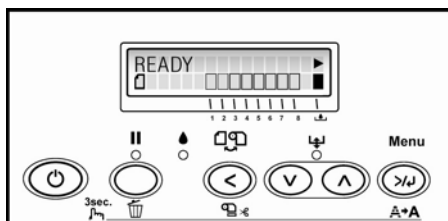
13. The following messages will appear:



14. Press the PAUSE key once.



15. The following message will appear. The printer is now ready for use.



	Channel							
Configuration	1	2	3	4	5	6	7	8
OEM	Matte K	C	M	Y	LK	Lc	Lm	LLk
ChromaBlast™	K	C	M	Y	K	C	M	Y



If the cartridge does not insert smoothly into the slot, double check to make sure you have the correct cartridge installed in the correct slot. If the ink light remains on after installing the cartridge, remove the cartridge and reinsert to ensure it was fully placed in the slot.

Tip:

- Perform a nozzle check from The ChromaBlast 4880 Driver™ v1.0. A few cleanings may be necessary to get a good nozzle check.



Printing and Heat Transfer Instructions

RECOMMENDED APPLICATIONS

White or light colored fabrics in 100% cotton.

PRINTING

Print using the supplied ChromaBlast 4880 Driver v1.0 program only.

The print side of ChromaBlast media is opposite the ChromaBlast logo. For the Epson 4880 place print side face up in the printer tray.

Mirror Image: Check this box in the ChromaBlast Driver to ensure the image prints in reverse and that text appears correctly when image is transferred. If your image is already reversed in your graphic program, leave this box unchecked.

TRANSFERRING THE IMAGE USING A COMMERCIAL HEAT PRESS

1. If desired, you may trim the non-printed area before transferring, leaving .25 in. margin around the printed area.
2. Place garment on the heat press. Cover with ChromaBlast paper with image face down.
3. Press image according to proper pressure, heat, and time settings.
4. Peel the paper off the shirt while the shirt is still hot using an even motion.
5. Stretch the image area while the shirt is hot from both left to right and top to bottom to reduce the hand.

HEAT PRESS SETTINGS

Pressure: Heavy. If using a pneumatic press, set the pressure to 60 psi.

Temperature: 375°F - 400°F (190°C - 205°C)

Time: 40 seconds. If you press the garment at a temperature higher than 375°F, reduce the transfer time to prevent scorching.

In order for the ChromaBlast Ink and Media to bond to the cotton fibers it is critical that the heat press settings above be used to achieve the best possible results.

STORAGE INSTRUCTIONS

Store ChromaBlast media in a cool, dry area within the provided plastic storage bag. Do not remove from carton until ready to use.

Revision 2/2008

ChromaBlast Driver™

User Guide

For Epson Stylus® PRO 4880

For distribution with ChromaBlast™ Media
v1.5 only

NOT FOR RESALE

ChromaBlast 4880 Driver™ v1.0 Introduction

Obtaining the benefits of the ChromaBlast 4880 Driver™ v1.0 color management is now incredibly easy - simply print from your application with the ChromaBlast 4880 Driver™ v1.0 rather than the Epson printer driver. The ChromaBlast 4880 Driver™ v1.0 prints your image just like the Epson printer driver except for the colors. Watch how it magically makes ChromaBlast™ ink colors picture perfect!

The ChromaBlast 4880 Driver™ v1.0 delivers both convenience and the highest quality ChromaBlast™ color management technology. The innovation demonstrated by the ChromaBlast 4880 Driver™ v1.0 is the result of our dedication to you, our customers. At Sawgrass Technologies, we are focused on delivering the highest quality digital transfer technology available. We fully expect that you will be “wowed” by the results you obtain with ChromaBlast™ ink and the ChromaBlast 4880 Driver™ v1.0.

The ChromaBlast 4880 Driver™ v1.0 runs under Windows XP and Vista.

System Requirements

Minimum Hardware:

Pentium 4 – 3.0GHz or Athlon XP 3000+ Processor

1 GB System Memory (2 GB System Memory is recommended)

Setup Instructions – Windows XP / Vista

Product Overview

The ChromaBlast 4880 Driver™ v1.0 is color management software that has been written as a Windows printer driver. It is designed to work with Epson ink-jet printers and Sawgrass ChromaBlast™ ink. The installation program will install Sawgrass color management software, the Sawgrass ChromaBlast™ printer driver software, and ColorSure tools and utilities.

Quick Start

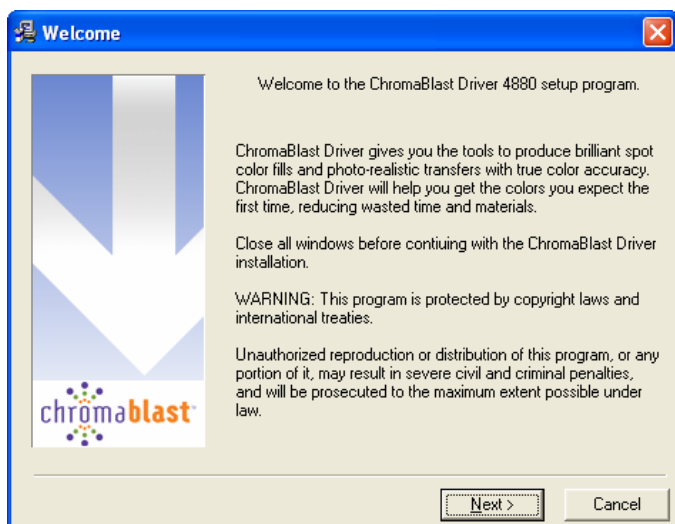
1. Unpack and setup printer as described in the Epson manual.
2. Install the Epson printer driver and verify printer operation.
3. Insert the ChromaBlast 4880 Driver™ v1.0 CD into the CD-ROM drive on the computer and install the ChromaBlast 4880 Driver™ v1.0.

Step By Step Installation

To get started printing as soon as possible, these are the steps Sawgrass recommends you perform while setting up your sublimation printer driver software.

1. Setup the printer according to the Epson instructions.
2. Install the ChromaBlast inks.
3. Install the Epson printer driver. According to the Epson user's manual.
4. After the Epson driver is installed, check to see which port the printer is set to:
 - a. In XP you can do this by clicking on Start, Printers and Faxes. For XP with the Classic menu enabled, click Start, Settings, Printers.
 - b. Right click on the Epson printer you just installed and click on the Properties option.
 - c. Select the Ports tab and *write down the port the printer is assigned to*. You will use this later in the ChromaBlast 4880 Driver™ v1.0 software installation.
5. Insert the ChromaBlast 4880 Driver™ v1.0 CD into your CD-ROM drive. The installation is self-starting. However, if the installation does not begin then Click Start, Run. Browse to your CD-ROM drive and click on PDNTM4880.exe.

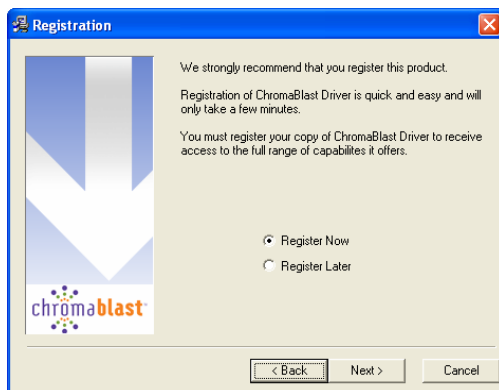
6. The Welcome screen is displayed. Click Next to proceed.



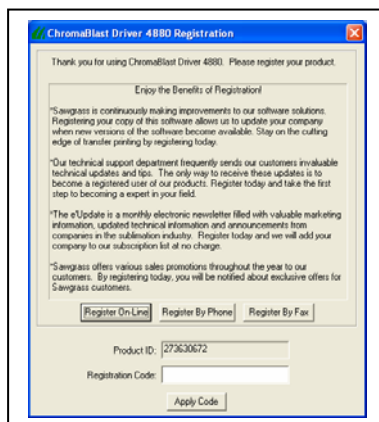
7. The License Agreement is displayed next. Select the appropriate choice for acceptance of the Licensing Agreement to continue.



8. If you have not previously registered the ChromaBlast 4880 Driver™ v1.0, you will be prompted to do so. Registering is the only way to take full advantage of the features in this Driver. If you choose to register later, select Register Later and click Next to proceed with the installation.

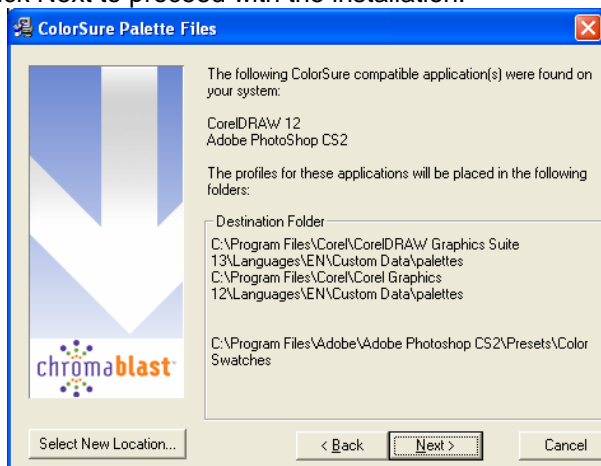


9. If you choose to register now, the registration screen will be displayed. To obtain your registration code you may do so in one of the following ways: Register on-line and receive your registration code via e-mail. Call Sawgrass Technologies, Inc. directly (888) 253-1679 and obtain your code over the phone. Send a fax and receive your registration code by fax. To register, you will use your Product ID (displayed on the registration screen) to obtain a Registration code. You will need separate registration code for every machine on which The ChromaBlast 4880 Driver™ v1.0 is installed. Enter your registration code and click the Apply Code button.

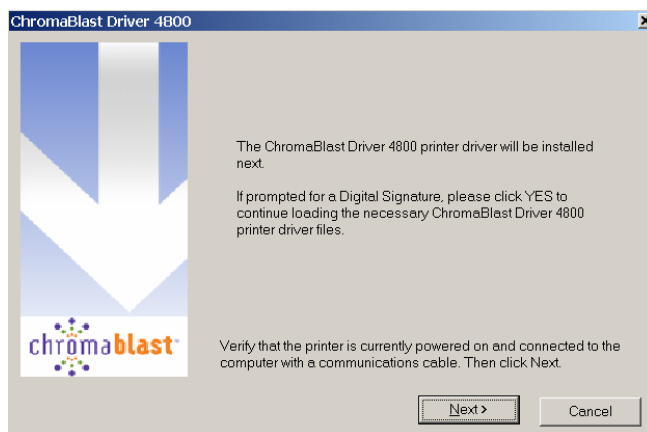


10. Sawgrass Technologies, Inc. provides ColorSure color palettes for use with Corel and Adobe. (Check the ColorSure section

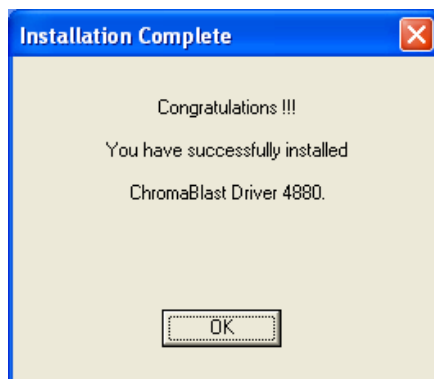
of the manual for information on how to use ColorSure to get perfect spot colors). If Setup detects either of these applications on your system, the palette files will be placed in the appropriate folder indicated in the Destination Folder box. Click Next to proceed with the installation.



11. The ChromaBlast 4880 Driver™ v1.0 installation program will attempt to use plug-n-play to determine the port that the printer is connected to, click Next to continue. *Note: Cancel any 'Found New Hardware' wizards that may start during this process, do NOT cancel any file copy process however.*



12. If the installation cannot find the printer port then you will be given the opportunity to choose the port you want to use for the product you are installing. Use the value that was recorded in step 4 above.
13. Once the installation has completed, the Installation Complete screen will display. Click OK to end the installation.



Using ChromaBlast 4880 Driver™ v1.0 in Windows XP / Vista

The ChromaBlast 4880 Driver™ v1.0 is simple to use. Whenever you have ChromaBlast™ inks in your printer, you should print using the ChromaBlast 4880 Driver™ v1.0. **Do not** print to your Epson printer with the Epson printer driver; printing with the Epson driver will not give you the benefit of color management.

Quick Start Example (Corel Draw)

- 1) Open/Create an image in Corel Draw.
- 2) Select print from the File menu.
- 3) Select the ChromaBlast 4880 Driver™ v1.0 printer.
- 4) Use the Properties button to access and set the Color, Output, Ink and Substrate, Resolution, and Advanced options.
- 5) Click Print.

Setting ChromaBlast 4880 Driver™ v1.0 printer properties

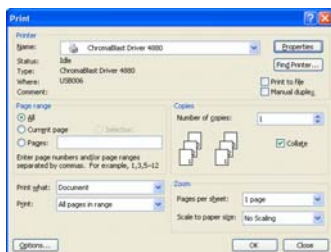
To configure this Driver for the correct substrate, you must display its printer properties. There are two ways to display the printer properties:

From the Windows Desktop:

1. Click on Start> Printers & Faxes
2. Right-click on your ChromaBlast 4880 Driver™ v1.0 printer.
3. Select the *Printing Preferences* button.

From an Application:

1. Select File, Print Setup.
2. Choose the ChromaBlast 4880 Driver™ v1.0 printer from the list of printers.
3. Click the Properties button.



ChromaBlast 4880 Driver™ v1.0 Properties Overview

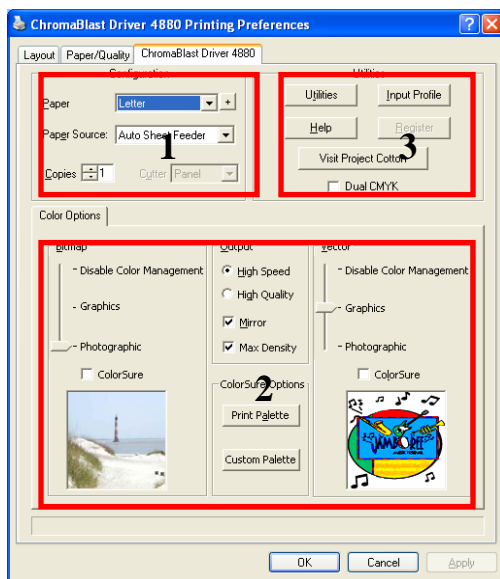
The following figure shows the printer properties for a registered version of the ChromaBlast 4880 Driver™ v1.0. The Advanced Color Options tab and the Print Palette functions will not be available if the product has not been registered.

There are three main property groups:


Configuration – Set Paper, Transfer Substrate, and Copy Count

Color Settings – Color management control options. (The Color Options group comes in two modes; Easy and Advanced) Both are described below.

Utilities – Utilities for printer maintenance, online help, product registration, and setting input profiles



Group 1 – Configuration

Paper Size – From the drop down list, select the paper size you wish to use. To add custom paper sizes click the  button to the right of the paper size drop down list. *Note: After adding a custom paper size, the printing preferences dialog must be closed and re-opened before the new paper size will show in the paper size drop down list.*

Copies – Sets the copy count for the number of prints to be made.

Group 2 - Color Settings

Overview

This tab gives you access to all of the color management controls available in the ChromaBlast 4880 Driver™ v1.0. Color correction allows you to create transfers from all kinds of images, from photorealistic images to spot color logos. For maximum flexibility, this Driver lets you color correct bitmap and vector elements differently, even if they are in the same graphics file. For example, if you scan a photograph and import it into CorelDraw, the ChromaBlast 4880 Driver™ v1.0 will use the color management settings that have been selected for Bitmap. If you then add text on top of the bitmap image, this Driver will use the color management settings that have been selected for Vector. The photograph and the text will be color corrected differently! Why? You can now sublimates images with realistic photographic backgrounds that have vivid spot color text.

Vector and Bitmap Explanation

Bitmaps are a grid of pixels. Bitmaps come from digital cameras, scanners, and photo cds. Bitmaps can also be created in applications like Corel PhotoPaint or Adobe PhotoShop. Bitmaps have file extensions like GIF, JPG, BMP, and TIF. Vector components consist of shapes, curves, lines, and text. They are created in programs such as CorelDraw and Adobe Illustrator. Higher end programs like CorelDraw can combine Vector and Bitmaps into a single image. As a rule of thumb, if the object in your image is made of curves, text, shapes, or fills, it will be color corrected using the ChromaBlast 4880 Driver™ v1.0 Vector settings. All other image types will be color corrected based on the ChromaBlast 4880 Driver™ v1.0 Bitmap setting.

Color Correction Settings

Photographic - This setting is most suitable for reproducing skin tones in scanned photographs.

Graphics - This setting is most suitable for reproducing life-like clipart.

Color Management Off - This setting prints your image with no color management applied.

ColorSure Enhancement - The ColorSure enhancement is used to replace specific colors in your image with a spot color chosen from the ColorSure palette. This resulting spot color enhancement is not affected by color setting. A ColorSure spot color will ALWAYS print the same. See Appendix C for an overview of ColorSure.

Print Palette Button – Prints the ColorSure palette for the selected substrate. ColorSure is a method for reproducing exact spot colors. The two main components are; 1) the transferred palette and 2) the CorelDraw, Corel PhotoPaint, and Adobe swatches. For a complete description on how to use ColorSure to get perfect spot colors, see appendix C.

Custom Palette Button – The Custom Palette utility enables you to add, edit, import and export custom colors to the ColorSure palette. If you need to precisely match a specific color, the Color Finder tool makes this a breeze. For a complete description on how to use the Custom Palette, refer to Appendix C.

Mirror – When you transfer an image, the result will be “flipped” when compared to the printed image. In order for your transfers to come out correctly, you must flip the image before transferring. Select this option to do the flipping for you. If you are doing this yourself in your editing application, make sure this option is turned off.

Max Density – This setting allows the maximum amount of ink to be printed which should create more vivid color and deeper blacks. If you see bleeding in your image, make sure to turn this setting off.

High Speed – If the printer supports multiple resolutions, choose the most appropriate setting. For soft substrates, the High Speed option works well.

High Quality – If the printer supports multiple resolutions, choose the most appropriate setting. For hard substrates, choose the High Quality option.

Group 3 – Utilities

Utilities – Click this button to display a utilities screen. From the utilities screen you can print a nozzle check pattern, run a print head cleaning cycle, align the printer's print head, spool a ChromaBlast 4880 Driver™ v1.0 print file to the printer, and print a page of primary ink colors.

Help – This will display a help dialog box for an easy overview of the ChromaBlast 4880 Driver™ v1.0 functions and settings. It also contains a link to the Sawgrass Technologies website.

Register – If the ChromaBlast 4880 Driver™ v1.0 product has not been registered, click this button for instructions on how to register the product and unlock all the features.

Input Profile – This option allows you to specify an input profile that the driver will use when color correcting your image. If you are printing scanned artwork and your scanner manufacturer provided ICC profiles for your scanner model, select the profile here. In order to select a profile IT MUST BE INSTALLED ON YOUR MACHINE. To install a profile on your machine, locate the profile on your machine using Windows Explorer. (The ChromaBlast 4880 Driver™ v1.0 supports both ICC and ICM profile types). Right click on the profile file name and select "Install".

Dual CMYK – This option should be checked if you have ChromaBlast CMYK inks loaded in both the left and right side of your Epson 4880 printer. If your Epson 4880 is set up for hybrid ChromaBlast / SubliJet IQ printing, then this box should be un-checked.

Appendix A: Network Printing in Windows XP / Vista

Network printing with the ChromaBlast 4880 Driver™ v1.0 in Windows XP and Vista is simple. Before a network printer can be used it must be installed on the network and shared.

Host Machine (Server)

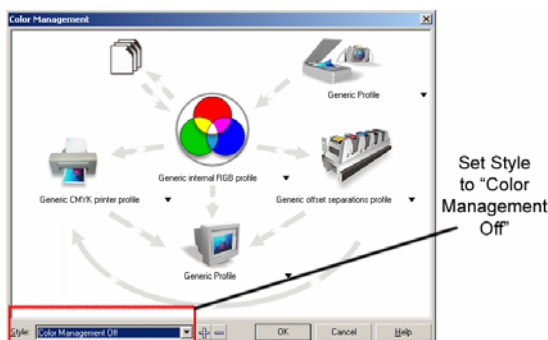
The server machine must have installed the printer and have the printer shared. To install the networked printer, run Start | Setting | Printer | Add Printer. The Wizard will guide you through setting up the printer. When prompted, choose “Network Printer” and browse to the server machine to locate the ChromaBlast 4880 Driver™ v1.0.

Appendix B: Over-Riding Design Software Color Management

The ChromaBlast 4880 driver provides a complete color management solution for your ChromaBlast™ media v1.5 printing. ***It is extremely important that you turn off any color matching features associated with your design software.*** An explanation of how to disable print-time color management in several popular design packages follows:

CorelDraw™ version 10, 11 and 12

1. Create a new graphic.
2. From the main menu choose Tools, Color Management. In the Color Management window (see figure below), set the Style option to Color Management Off.



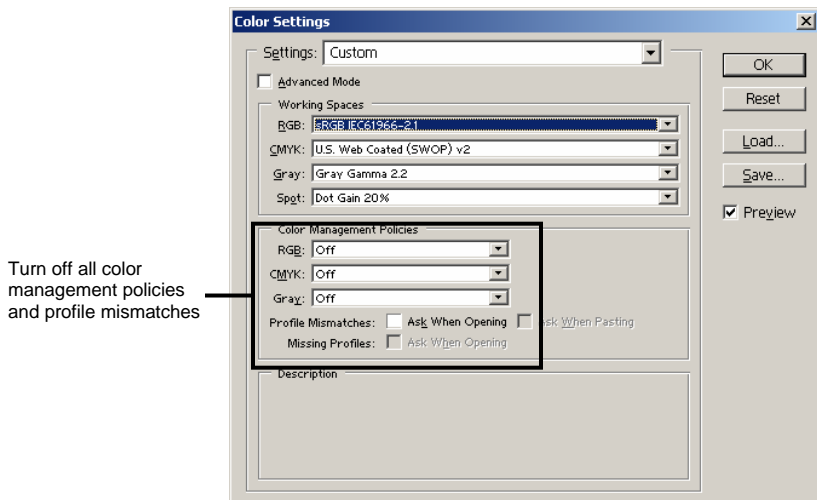
CorelDraw™ version X3



Adobe Photoshop™ 7, CS, and CS2

Color Setup

From the main menu choose Edit, Color Settings. On the Color Settings dialog box, turn all Color Management Policies off. Turn off Profile Mismatches.

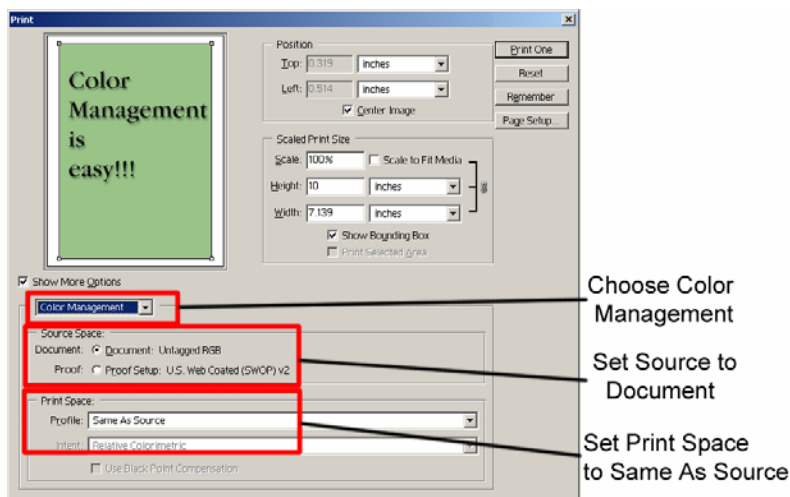


To Print:

Always select File, Print with Preview. On the print dialog page, set the options as described below:

- Check Show More Options
- Choose Color Management
- Choose Document as Source Space
- Choose Same as Source for Print Space

From the Color Management drop option list, make sure that Source is set to "Document" and Print Space is set to "Same As Source."



Appendix C: Using ColorSure™ and Custom Palette

I. Introduction

ColorSure is a method for reproducing exact spot colors. There are four main components of the ColorSure System: 1.) the printed palette; 2.) Color Finder; 3.) Custom Palette; and 4.) the CorelDRAW and Adobe application palettes / swatches.

1. **ColorSure Palette:** This is your main color palette that includes a wide variety of 152 commonly used colors.
2. **Color Finder:** If a color you need is not on the ColorSure palette, the Color Finder tool allows you to locate the exact custom color you are looking for.
3. **Custom Palette:** With the Custom Palette feature, you can add new custom colors to the existing ColorSure Palette mentioned in step 1.
4. **Application Palettes:** You can add your Color Finder colors to an existing application palette, or you can add multiple custom colors to new, custom palette files (*.cpl, *.acl, etc.).

II. Printing the ColorSure Palette

The first thing you will want to do is to print your ColorSure palette to the shirt you will be using. Most likely you will have customers who desire precise colors. Having your ColorSure palette available allows the customer to choose the color from the palette that is the closest match to what they want, and this gives you a starting point for finding the exact custom color that will match your customer's needs.

To print the ColorSure palette, follow the steps below:

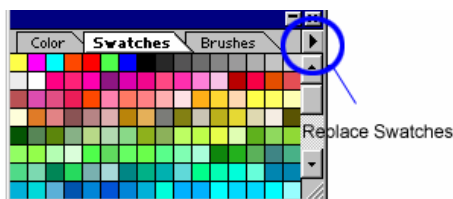
- Click 'Start' and navigate to the 'Printers and Faxes' folder. Right-click on your ChromaBlast 4880 Driver™ v1.0 printer and select 'Printing Preferences' from the menu. You may also open this Driver from within an Adobe or Corel program by going to File, Print, and choosing the ChromaBlast 4880 Driver™ v1.0 printer from the pull-down menu. Click Properties to open the ChromaBlast 4880 Driver™ v1.0.

- Select the color settings and the output (high speed, high quality) that you wish to print the palette, and click the box 'Print Palette'.
- You now have a visual representation of how the ColorSure palette colors will appear on your t-shirt.

III. Designing Your Artwork

By picking colors from the ColorSure palette, you will be able to consistently reproduce colors in a reliable manner. To assist you in designing your artwork, the ChromaBlast 4880 Driver™ v1.0 installs three palettes: two for Adobe products and one for Corel products. These colors match the palette that is printed from within the ChromaBlast 4880 Driver™ v1.0.

- To open the ColorSure Palette in Corel 10, 11, and 12, choose Window | Color Palettes | Open Palette. Select the file "ChromaBlast_Rut.cpl, ChromaBlast _Uni.cpl, or ChromaBlast _Wil.cpl depending on which palette you wish to load."
- To open the ColorSure Palette in Illustrator, choose Window | Swatch Libraries | Other Library. Navigate to where it was installed to when you installed PowerDriver: C:\Program Files\Sawgrass\PowerDriver\Adobe Illustrator and hit Open. *For easier access to the Palette file copy it from this [above] path to Illustrator10\Presets\Swatches and the palettes will show up in your pull-down list directly under the Swatch Libraries menu. Other versions of Illustrator will have similar steps.*
- To open the ColorSure Palette in Adobe PhotoShop, choose the Swatches Palette, click the option arrow on the palette, choose *Replace Swatches* and pick the "ChromaBlast _Rut.aco, ChromaBlast _Uni.aco, or ChromaBlast _Wil.aco" file.



HINT

After you have the ColorSure palette loaded into CorelDraw, move the cursor over each color. As the cursor hovers over each different color, the ColorSure name is displayed in the status area at the bottom of the screen.

IV. Using Color Finder

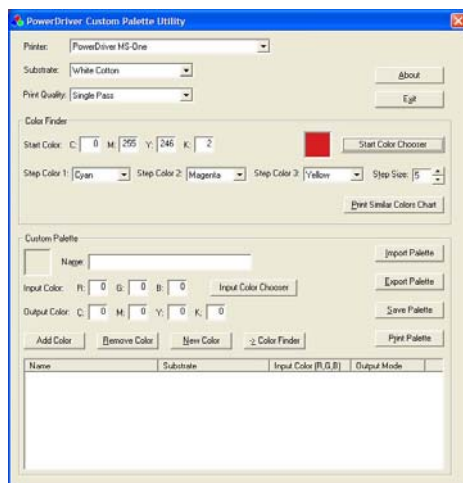
After printing the ColorSure Palette, you see that you have an array of colors to work with. There will be times, however, when the color you need is not included in the ColorSure Palette. This is a common example of when you will launch the ChromaBlast 4880 Driver™ v1.0 Custom Palette Utility.

The Custom Palette Utility is a small program that coincides with the ChromaBlast 4880 Driver™ v1.0 to assist you in finding custom colors and making custom palettes.

Within the Custom Palette Utility is the Color Finder tool. This tool allows you to start with a specific color (e.g. navy blue) and find similar colors in the same family by adding and subtracting up to three colors (CMYK) called 'Step Colors.' For example, starting with navy blue with a CMYK value of 60,60,0,40 and choosing two step colors (e.g. cyan and magenta) would expand the original navy blue in four directions (more cyan, less cyan, more magenta, and less magenta). This expanded color chart is outputted directly to your printer.

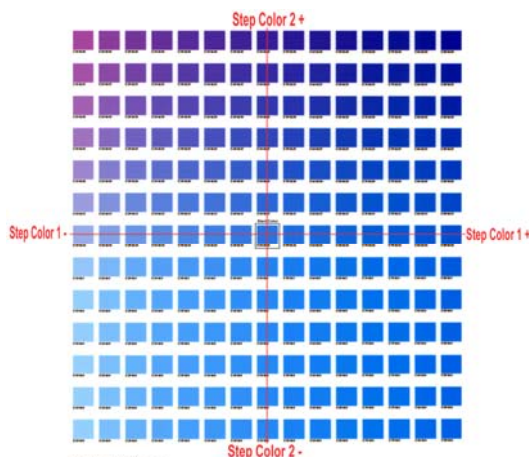
How to use Color Finder:

- First, open the Printing Preferences window.
- At the bottom of the window, click the **Palette Utility** button; this will open the **Custom Palette Utility** window.
- Select the appropriate settings for Printer, Substrate, and Print Quality. Then click the **Start Color Chooser** button and select your desired starting color from the basic colors or the color matrix. To use the color matrix, click anywhere in the matrix window. You can use the slider at the right of the matrix to adjust luminosity. Clicking 'OK' will automatically fill the CMYK boxes with the corresponding values. If you do not wish to use Color Chooser, you also have the option to manually enter the **Start Color** values in the CMYK boxes.
 - For advanced users, CMYK values can be determined by printing out a Custom Palette, which is outlined in the next section.



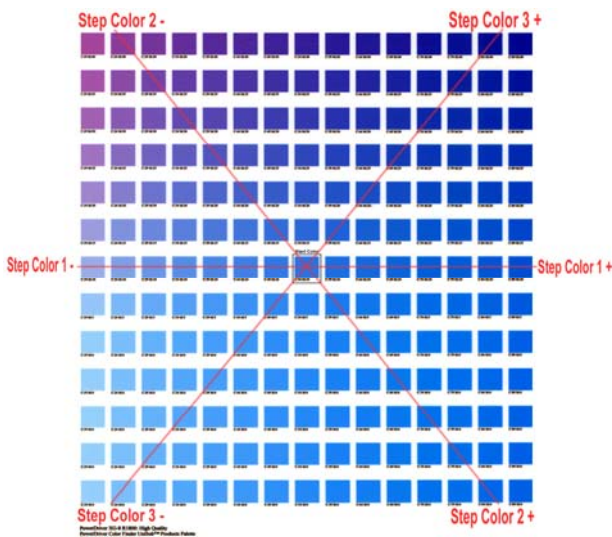
Custom Palette Utility

- You may alter the chosen start color's CMYK value by selecting two or three **Step Colors**. Using multiple step colors will present you with a greater range and variety of colors to choose from.
 - For instance, if you choose to modify your Start Color with two steps, then Step Color 1 will change its values on the X (horizontal) axis and Step Color 2 will change its values on the Y (vertical) axis.



Color Finder Palette with two Step Colors

- If you modify your Start Color with three steps, Step Color 1 will remain the same. However Step Color 2 and Step Color 3 will form an imaginary 'X' and their values will change on opposing diagonal Y axes.



Color Finder Palette with three Step Colors

- Next, determine what **Step Size** you want to apply to the Color Finder palette. This is simply a question of how much you want your Start Color to fluctuate. If your Start Color is close to the color you are looking for, use a low Step Size (i.e. 5-10). However, if your start color is not close to what you are looking for, use a higher Step Size. You can enter any Step Size value between 1 and 40.

As an example, let's say your Start Color is C:20, M:100, Y:150, K:0 and you select Cyan and Magenta to be your Step Colors. You also enter a Step Size of 10. When the 'Print Similar Colors Chart' button is clicked, your Start Color will be in the middle of the Similar Colors Chart and from there each color will vary the Cyan and Magenta values by 10.

- When you are finished selecting the Start Color, Step Colors, and the Step Size, click on the **Print Similar Colors Chart**

button. This will print your custom Similar Colors Chart directly to the printer.

- After printing the Color Chart, try to match your desired color to one that is on the palette. If you find a suitable match, you are finished using the Color Finder tool. Move on to **Section V. The Custom Palette**.
- If you couldn't find an accurate match on the first printed Similar Colors Chart, don't worry. Follow the easy steps below, and you will find a more suitable custom color.
 1. First, try to locate a new Start Color from the chart that is closer than the original color.
 2. Next, after finding a more suitable Start Color, write down that color's CMYK value. Here is how to obtain this value. There are numbers under each color that are dependant upon which Step Colors you chose. For example, it might say C:70 M:120. Take note of these values. Then, at the bottom left of the Color Finder palette you will see a full set of CMYK values. The new Start Color's CMYK value would be C:70, M:120 and whatever the YK values are from the full set.
 3. Lastly, plug the CMYK values for the new Start Color into the boxes in Color Finder, choose your Step Size, and click on Print Similar Colors once again. Continue with steps 1-3 until you find your desired color.

V. The Custom Palette

Let us assume that you have found the exact color you need using the Color Finder tool. What you will want to do next is apply these custom color values to either an existing palette, or to create a new custom palette altogether. This allows you access to this color again should the same job arise.

How to use Custom Palette:

- First, you need to assign the CMYK values of the matched color from the Similar Colors Chart to the **Output Color** CMYK fields in the Custom Palette section.
- Give your new custom color a descriptive **Name** in its designated field (e.g. IBM Blue).

- Next, assign an RGB **Input Color** value. There are two methods to establish this value.
 1. If you have the original file, sample the color that was matched in your graphic design application with the eye dropper tool. This will give you the RGB value of that color. Input this value into the RGB Input Color fields of the Custom Palette section.
 2. If you do not have the original file, or the artwork has not yet been designed, simply click on the 'Input Color Chooser' button, and then click on "Define Custom Colors". From the color matrix, find a color that closely resembles the color that you are adding to the custom palette. At the bottom-right of the color matrix window are the RGB values. Simply click 'OK' and the RGB Input Color values will be automatically entered. Please take note of these RGB values for later use in your design applications.
- Click the **Add Color** button. A window will pop up asking you whether you want to add the color to the palette for all substrates, or just the current substrate. Click 'YES' here unless you have the same custom color saved on palettes for other substrates. Another window will then ask you if you want to save the custom color for all resolutions or just the current one. Click 'YES' here unless you have the same custom color saved on palettes for other resolutions.
- Lastly, click the **Save Palette** button. When finished, simply Exit out of the window.

** The 'Import Palette' and 'Export Palette' buttons are convenient to have in the event you need to transfer palettes to and from different computers.*

VI. Adding Swatches to your Application Palette

It is possible to add your custom color(s) swatch to an application palette as well. You will need to take note of the Input Color RGB value that you assigned in the previous step in order to create the new swatch. Refer to your specific design application software's manual for instructions on this.

Supplies & Equipment

ChromaBlast™ ink and v1.5 media are sold through a network of Authorized ChromaBlast™ Channel Partners. A full listing of authorized resellers is available on our Web site at www.sawgrassink.com.

Operating Conditions

Certain environmental conditions should be taken into account for the operation of ChromaBlast™ ink including temperature and relative humidity.

- Supported operating conditions are 65 ~ 80 °F with 35~60% relative humidity.
- Optimum operating conditions are 70 ~ 75 °F with 40~50% relative humidity.

Ink Storage

- ChromaBlast™ v1.5 product should be stored in an environmental controlled room with a temperature range of 50 °F ~ 75 °F.
- Do not expose ChromaBlast™ cartridges directly to light, especially sunlight, for extended periods.
- For best results, install your ChromaBlast™ cartridges by the date on the cartridge. Please refer to the individual cartridge for the specific ink expiration date.

Media Storage

- Store the ChromaBlast™ v1.5 media in a cool, dry area within the provided plastic storage bag. Do not remove from carton until ready to use.

Troubleshooting

The troubleshooting tips found in this section relate mainly to problems that can be seen in transferred ChromaBlast™ images. If you are having problems related to the performance of your printer, please refer to the *Problem Solving* section found in the *EPSON Stylus Pro 4880 Printer User's Guide*.

The colors in my transferred image are incorrect

- The image may need color adjustment. Use the ChromaBlast 4880 Driver™ v1.0 color matching software. For more information on how to use this software, please see the section entitled *ChromaBlast 4880 Driver™ v1.0 User's Guide*.
- Ensure you used the right printer driver and driver settings. Please see the section entitled *ChromaBlast 4880 Driver™ v1.0 User's Guide*.
- Ensure you pressed the item with the proper time, temperature, and pressure. For guidelines see the section entitled *Printing and Heat Transfer Instructions*.
- Verify all colors print correctly. Run the Nozzle Check utility and clean the print heads as required.

My printout gets cut off on the bottom or side

- Verify the printer driver is setup for the correct paper size. Your printer driver setting needs to match the media size that is loaded in your printer.
- Ensure the right paper guide is in the proper position on the printer. When setting up the printer, slide the right paper guide to the left until it clicks into position.

My image looks good but it washes out

- Ensure you pressed the garment with the proper time, temperature, and pressure. For guidelines, see the section entitled *Printing and Heat Transfer Instructions*.
- Ensure you used the recommended ChromaBlast™ v1.5 media and inks.

Colors are light and splotchy

- Ensure you printed on the correct side of the media. For the Epson 4880 place print side face down in the printer tray so that the missing corner is in the top right hand side when facing the printer.
- Ensure you used the recommended ChromaBlast™ v1.5 media and inks.
- Ensure you pressed the item with the proper time, temperature, and pressure. For guidelines, see the section entitled *Printing and Heat Transfer Instructions*.
- Verify your printer driver settings are correct. Please see the section entitled *ChromaBlast 4880 Driver™ v1.0 User's Guide* for additional information.

My image looks blurred

- Ensure you pressed the item with the proper time, temperature, and pressure. For guidelines, see the section entitled *Printing and Heat Transfer Instructions*.
- Ensure you used the recommended ChromaBlast™ v1.5 media and inks.
- Ensure you printed on the correct side of the media. For the Epson 4880 place print side face down in the printer tray so that the missing corner is in the top right hand side when facing the printer.
- Verify that the printer's print heads are properly aligned. For further instructions, see the *EPSON Stylus Pro 4880 Printer User's Guide*.

My image has gaps or bands present

- Ensure that all of the printer's nozzles are firing properly. Perform a Nozzle Check from the *Utility* tab of your printer driver. For further instructions, see the *EPSON Stylus Pro 4880 Printer User's Guide*
- If one or more of the nozzles fail to print, perform a Print Head Cleaning. For further instructions, see the *EPSON Stylus Pro 4880 Printer User's Guide*.

Technical Support

If you are having difficulties achieving good results from your ChromaBlast™ v1.5 inks or media, you have several support options:

1. **Telephone:** You may contact your authorized SubliJet reseller during their normal hours of operation for assistance. A full listing of authorized SubliJet Resellers is available on our Web site at www.sawgrassink.com. In addition, you may also contact Sawgrass Technical Support at (888) 253-1679 between the hours of 8:30 AM and 5:30 PM Eastern Standard Time.
2. **Internet:** Visit the *Technical Support* area of the Sawgrass Technologies, Inc. website at www.sawgrassink.com. The troubleshooting utility found here will provide you with solutions to some of the most common problems. You may submit a detailed description of your problem if you need further assistance.
3. **E-mail:** You may e-mail Sawgrass Technical Support with a detailed description of your problem at support@sawgrassink.com.
4. **Fax:** You may fax a detailed description of your problem to Sawgrass Technical Support at (843) 849-3847.

Project Cotton

Project Cotton is a series of workshops and courses designed to provide the knowledge, skills and strategies for growing a profitable digital cotton decorating business.

Project Cotton will provide current and prospective garment decorators with knowledge, skills, strategies and ideas to build and grow their cotton printing business.

Whether you are a new system purchaser, or a current user wanting to learn more, Project Cotton can help you grow and expand your business. Project Cotton will provide insight into profitable new markets and new products. Project Cotton will share innovative sales strategies to assist you in increasing sales and growing your business. On the operations side, Project Cotton provides tools to increase the productivity and profitability of your business.

Project Cotton events are offered throughout the country through Authorized Sawgrass Channel Partners

Please visit our website to request more information on an event in your area. Call toll-free 1.888.780.7349 or email project.cotton@sawgrassink.com.

We look forward to seeing you at a Project Cotton event in the very near future!

